

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-------------------------------------------|----------------|----------------------|-------------------------|----------------------|--|
| 10/009,657 | 03/11/2002 | Timothy O'Farrell | MAC-106 | MAC-106 8384 | |
| 20028 7 | 590 06/27/2005 | | EXAMINER | | |
| Lipsitz & McAllister, LLC 755 MAIN STREET | | | GHULAMALI, | GHULAMALI, QUTBUDDIN | |
| MONROE, CT 06468 | | | ART UNIT | PAPER NUMBER | |
| · | | | 2637 | | |
| | | | DATE MAILED: 06/27/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | dK | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| | 10/009,657 | O'FARRELL ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Qutub Ghulamali | 2637 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM | | | | | | |
| THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>01 March 2002</u> . | | | | | | |
| 2a) This action is FINAL . 2b) This | · _ · · · · · · · · · · · · · · · · · · | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under E | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-22 is/are pending in the application. | | | | | | |
| · · · · · · · · · · · · · · · · · · · | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5)⊠ Claim(s) <u>1-22</u> is/are allowed. | | | | | | |
| 6) Claim(s) is/are rejected. | | | | | | |
| | 7) Claim(s) is/are objected to | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>11 March 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail Da | (PTO-413) | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) 🔲 Notice of Informal P | atent Application (PTO-152) | | | | |
| Paper No(s)/Mail Date <u>1/23/02</u> . | 6) | | | | | |

Application/Control Number: 10/009,657 Page 2

Art Unit: 2637

DETAILED ACTION

1. This application is in condition for allowance except for the following formal matters:

The specification must highlight each section with a heading in accordance with 37 CFR 1.77(b). The spacing of the lines of the specification must be double spaced so as to make reading and entry of amendments easy.

With Claims 1 and 12, appropriate use of colons and semicolons must be exercised. For example in claim 1, line 5, after "steps of" a colon must be placed. Similarly, a semi-colon must replace comma at the end of each step. See 37 CFR 1.75 and MPEP 608.01(m).

Similarly, the word "type" in claim 1, line 4 must provide antecedent basis.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Allowable Subject Matter

- 2. Claims 1-22 allowed.
- 3. The following is an examiner's statement of reasons for allowance:

With reference to claims 1 and 12, the prior art in combination with other claimed limitations considered as a whole, neither teaches nor suggests a data communication network: select a seed set of sequences of a given size having a plurality of inner sequences;

Application/Control Number: 10/009,657 Page 3

Art Unit: 2637

generating a plurality of cosets from the seed set of sequences by multiplying in turn each inner

sequence by an element of an associated sequence;

constructing a subset of sequences by concatenating the sequences of a coset;

constructing a full set of sequences by concatenating subsets of sequences for simultaneously

generating a periodic signal for acquiring symbol synchronization; and

a difference squarewave signal for acquiring and maintaining chip synchronization, a chip.

synchronization signal being generated by subtracting a sum of even groups of correlator

outputs from a sum of odd groups of correlator outputs.

Such limitations, as recited in claims 1 and 12, are neither anticipated nor rendered obvious by

the prior art.

4. Claims 2-11 and 13-22 are allowed by virtue of their dependency to claims highlighted

above.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Application/Control Number: 10/009,657

Art Unit: 2637

US Patents:

Bruckert et al (USP 5,781,583) discloses Method and system for communication over multiple

Page 4

channels in a spread spectrum communication system.

Jones et al (USP 5,696,789) discloses a novel code division multiple access (CDMA) system and

apparatus is provided which permits a plurality of encoded modulated data messages to be

transmitted simultaneously on the same channel.

Agrawal et al (USP 6,366,600) shows a spreader architecture for direct sequence spread

spectrum communications is disclosed.

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Qutub Ghulamali whose telephone number is (571) 272-3014.

The examiner can normally be reached on Monday-Friday from 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/009,657

Art Unit: 2637

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QG. June 22, 2005.

JAY K. PATEL
SUPERVISORY PATENT EXAMINER